UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,364	10/20/2003	Tatsumi Kumada	4041J-000792	4386

27572 7590 05/01/2006

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER	
FORD, JOHN K	

ART UNIT	PAPER NUMBER
3753	

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,364	KUMADA ET AL.	
	Examiner	Art Unit	
	John K. Ford	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 3/24/06

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) 3,5-7 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,2,4 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10/20/03
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Applicant's election of the species of Figures 1-8, claims 1, 2 and 4, without traverse in the March 24, 2006 response is acknowledged. It is of great concern to this examiner that many pertinent prior art references invented by the applicants here have not been brought to the examiner's attention and are far more pertinent than what has been cited on the PTO-1449 form. Please make sure that Denso and applicants understand their obligations under Rule 56. The primary reference here, assigned to Denso, shares two inventors with the current application. Are there any other prior art patents that name any of the inventors of the current inventive entity that the examiner should be aware of because they are material to what is being claimed here?

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner doesn't understand what the phrase "air conditioning state" in the last paragraph of claims 1, 2 or 4 is referring to. Does "state" mean temperature? Does it mean something else? What does it mean?

The entire phrase in each of claims 2 and 4 beginning "or is closer to" and terminating at the end the respective one of claims 2 and 4 is deemed to be not descriptive of the invention. The relationship attempting to be claimed is more correctly

stated at page 18, lines 20-24 of the specification and in the paragraph spanning pages 21 and 22 of the specification. The claims are not stating what the specification discloses. Please make claims 2 and 4 descriptive of the disclosed invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as obvious over Kawai et al. (USP 6,397,615).

In Figures 47-53, a dual zone air conditioner substantially identical to the one disclosed here is shown. This disclosure anticipates everything claimed in claim 1 down to, but not including, the last paragraph of claim 1. Lacking in Figures 47-53 is an occupant detector and adjustment means for one of the temperature measurement, preset temperature or target air temperature. However in Figure 45-46, the occupant

detector and the adjustment means are disclosed. It would have been obvious to have used the occupant detector and the adjustment means shown in Figures 45-46 in the system of Figure 47-53 to advantageously improve passenger comfort when the driver temporarily gets out of the passenger compartment (an advantage explicitly disclosed in column 28, lines 15-16 of Kawai. As shown in Figure 46, the control means clearly adjusts the target discharge temperature TAO.

Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Kawai et al. (USP 6,397,615) and Fusco et al. (USP 6,454,178)

In Figures 47-53, a dual zone air conditioner substantially identical to the one disclosed here is shown. This disclosure anticipates everything claimed in claim 1 down to, but not including, the last paragraph of claim 1. Lacking in Figures 47-53 is an occupant detector and adjustment means for one of the temperature measurement, preset temperature or target air temperature. Fusco teaches in a dual zone system in steps 106 and 108, controlling all unoccupied zones to optimize comfort in the occupied zone. In view of such a teaching it would have been obvious to one of ordinary skill in the art to have used all of the environmental measurements from the occupied zone (say the driver zone, when he/she is driving alone) in the computation of TAO(i) in col. 31, lines 10-12 in Kawai for all the unoccupied zones (e.g. TAO(Pa)) such that the driver

if he/she were the only occupant of the automobile would be optimally comforted from all zone discharges to his/her optimal temperature TAO (Dr).

Any inquiry concerning this communication should be directed to John K. Ford at telephone number 571-272-4911.